

**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY**

MELISSA M. VIETS and RUSSELL S. VIETS,	:	
	:	
Plaintiffs,	:	Civil Action No. 06-3878 (MLC)
	:	
v.	:	
	:	
DOREL JUVENILE GROUP, INC.,	:	
	:	
Defendant.	:	
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	:	
	:	
DOREL JUVENILE GROUP, INC.,	:	
	:	
Defendant/Third-Party Plaintiff,	:	
	:	
v.	:	
	:	
LEONARD D. VANDERWIELE,	:	MEMORANDUM
	:	OPINION
	:	
Third-Party Defendant.	:	
	:	
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HUGHES, U.S.M.J.

I. INTRODUCTION

This matter has come before the Court by Motion of Defendant Dorel Juvenile Group, Inc. (“Defendant”) for Summary Judgment on Plaintiffs’ Melissa M. Viets and Russell S. Viets (“Plaintiffs”) product liability claims [dkt. entry no. 31], returnable on July 10, 2008. Plaintiffs filed opposition to Defendant’s motion on May 15, 2008. Defendant filed a reply brief to Plaintiffs’ opposition on May 27, 2008. The parties consented to the jurisdiction of a Magistrate Judge pursuant to Federal Rule of Civil Procedure 72 for purposes of summary judgment. The

Court heard oral argument in this matter on July 10, 2008. For the reasons stated herein, Defendant's Motion for Summary Judgment is denied in part and granted in part

II. BACKGROUND AND PROCEDURAL HISTORY

This litigation arises from a products liability action in which Plaintiffs allege that their four-year-old daughter, Jacqueline Viets ("Jacqueline"), died in an automobile accident due to a defectively designed car seat, the Cosco Complete Voyager ("Voyager"). (Def.'s Br. at 1.) Defendant has moved for summary judgment arguing that (1) there is no evidence that any defect in the car seat was a substantial factor in Jacqueline's injuries, and (2) there is no evidence that there was a reasonable alternative design to the car seat using either a "state of the art" or a "risk/utility" analysis. *Id.*

The accident occurred on July 2, 2004 in Bayville, New Jersey. *Id.* Plaintiff Melissa Viets drove a 1999 Volkswagen Passat westbound on Serpentine Road and collided frontally with an eastbound 1999 Dodge Ram Pickup truck driven by Third-party Defendant, Leonard Vanderwiele ("Mr. Vanderwiele"). ARCCA INC., *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* 2 (2007). It is undisputed that the accident was caused by Mr. Vanderwiele's reckless driving. (Def.'s Br. at 1.) At the time of the accident, Jacqueline was sitting in the left-rear passenger seat in a Voyager belt-positioning booster car seat designed and manufactured by Defendant. *Id.* at 2. Jacqueline was almost four-years old, weighed thirty-seven (37) pounds, and was thirty-eight and half (38.5) inches tall. *Id.*

Due to the severity of the accident, Plaintiffs and their medical expert recognized that serious and fatal injuries were likely. *Id.* Plaintiff Melissa Viets suffered fractures to her face, neck, and wrist, in addition to cervical spinal cord injury. *Id.* Jacqueline died after suffering,

among other injuries, a broken neck. *Id.* Even though the Voyager complies with governmental performance safety standards, Plaintiffs contend that the design of the Voyager is defective. *Id.*

Unlike car seats that have their own internal harness, a belt-positioning booster (“BPB”) seat uses the vehicle’s shoulder and lap belt to directly restrain Jacqueline. (Van Arsdell’s Decl. ¶ 3.) Plaintiffs’ “defects” expert, Gary Whitman (“Mr. Whitman”), claims that this design is defective because the routing of the vehicle’s shoulder belt through the BPB’s shoulder slots can “introduce slack” in the system, resulting in “dynamic amplification of acceleration and loads” experienced by a child occupant, such as Jacqueline, in a crash. (Whitman Dep. at 76.) Furthermore, Mr. Whitman also stated that the design of BPBs is defective because children are more likely to sustain abdominal injuries from “submarining”¹ under the lap belts of a BPB, than if they were restrained in a seat with a five-point harness. *Id.* at 62-63.

A. Defendant’s Arguments

1. *Plaintiffs’ Inability to Demonstrate that any Defect in the Car Seat was a “Substantial Factor” in Producing Jacqueline’s Injuries*

Defendant argues that Plaintiffs have no evidence that either of these possible defects contributed to Jacqueline’s injuries. (Def.’s Br. at 3.) Neither Mr. Whitman nor Dr. Howard Adelman (“Dr. Adelman”), Plaintiffs’ forensic pathologist expert, could quantify the amount of the “amplification of accelerations and loads” that was attributable to the Voyager’s design, nor were they able to say whether this amount was sufficient to cause injuries that would not have

¹ Submarining occurs when the lap belt positioned on the pelvis slides off the pelvis during the crash and loads the soft abdominal region, subjecting the organs and tissues of the abdomen to potentially injurious loads. ARCCA INC., *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* 9 (2007). These kinematics also cause the shoulder belt to shift up higher towards the individual’s neck. *Id.* at 10.

occurred otherwise. *Id.* In addition, neither Mr. Whitman nor Dr. Adelman know how much force was required to break Jacqueline's neck nor how much less force Jacqueline's neck might have sustained had Jacqueline been in some alternative design car seat. *Id.* Further, Dr. Adelman could not give an opinion about the amount of Jacqueline's "submarining" or the possible increased severity of Jacqueline's injuries as a result of the "submarining." *Id.*

2. *Plaintiff's Alternative Designs are not "Reasonable"*

Plaintiffs offer two alternative designs, the Fisher-Price Safe Embrace ("the Safe Embrace") and the Britax Wizard ("the Wizard"), which Plaintiffs claim to be practical substitutes to the Voyager. *Id.* at 4. Defendant argues that the two alternative designs offered by Plaintiffs are not practical substitutes for the Voyager. *Id.* Unlike the Voyager, which is a BPB seat without an internal harness, Defendant argues that the Safe Embrace and the Wizard are convertible seats with internal harnesses. *Id.* BPB seats, like the Voyager, can be used only forward-facing to restrain children who weigh between thirty (30) and eighty (80) pounds, by running the automobile's lap and shoulder seat belt directly in front of the child. *Id.* Convertible seats, like the Safe Embrace and the Wizard, can be used rear-facing for infants, who weigh between twenty (20) and forty (40) pounds, and forward-facing for toddlers, who weigh between forty (40) and sixty-five (65) pounds. *Id.* Furthermore, a convertible seat's internal harness directly restrains the child, while the automobile's seat belt is used only to restrain the car seat itself. *Id.*

Defendant also argues that the Safe Embrace and the Wizard are not practical substitutes for the Voyager because of the availability and pricing of the products. *Id.* at 5. Unlike the Voyager, which has been on the market continuously since 1999, the Safe Embrace was sold only

between 1998 and 2001 and the Wizard was sold only between 2003 and 2005. *Id.* Furthermore, the Safe Embrace's retail price was approximately \$100, and the Wizard's retail price was approximately \$269. *Id.* The Voyager, on the other hand, sells at a retail price of \$30. *Id.* Defendant claims that this low price was an important factor in the Plaintiffs' decision to purchase the booster seat in 2004. *Id.*

Defendant further argues that convertible seats, such as the Safe Embrace and the Wizard, are more likely to be misused over BPB seats, and therefore do not make them practical substitutes for the Voyager. *Id.* Car seats with a five-point harness, like the Safe Embrace and the Wizard, require constant adjustment as the child grows, and still require a parent to install the child seat in the vehicle with the seat belt. *Id.* BPB seats, on the other hand, avoid the need for a harness since they only use the automobile's own lap and shoulder belt, which automatically adjusts its tension around the child. *Id.* Defendant cites studies that show that the more difficult a car seat is to use, the more likely it is to be misused. *Id.* (citing a 2004 study by the National Highway Traffic Safety Administration finding that "critical misuse" was found in 80% of convertible and forward-facing child restraints with internal harnesses, where only 40% was found in BPB seats) (citations omitted).

B. Plaintiff's Argument

1. *The Defects in the Car Seat were a "Substantial Factor" in Producing Jacqueline's Injuries.*

Plaintiffs argue there is evidence that the defects in the car seat contributed to Jacqueline's injuries. Plaintiffs claim that BPB seats are defective since they do not restrain children who weigh less than forty (40) pounds as well as a convertible seat with a five-point

harness would. (Whitman Dep. at 47.) Plaintiffs point to the testimony of Mr. Whitman in which he states that field data shows “that children in crashes much more severe than this one can withstand the forces, whatever they might be, when [they are] well restrained in a tethered five-point.” *Id.* at 44. In addition, Mr. Whitman explains that there is no data of any real-world crashes in which a child, properly restrained in a five-point harness seat, sustained a fractured neck. *Id.* at 46.

Mr. Whitman states that children “get [a] much better crash ride-down with a good five-point child safety seat than [they] would in . . . a belt positioning booster.” *Id.* at 40. Mr. Whitman explains that the characteristics of a “good crash ride down” are “that both shoulders are well-restrained, the upright position is maintained, and [that] there is no focus loading.” *Id.* at 20. The harness of a convertible seat is locked continuously while a child is restrained in the seat, and therefore slack cannot be pulled into the harness and the belts are unlikely to become mis-positioned. *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 21. Mr. Whitman states that a possible scenario in this accident was “that Jacqueline’s posture was such that Jacqueline was slumped and the belt may have already been off the pelvis into the abdomen.” (Whitman Dep. at 63.) This is a problem with BPB seats because “with an unlocked lap/shoulder belt . . . the child can move around and get out of position because the belts move easily [since they] are not locked.” *Id.*

In addition, restraint loads should be distributed over large areas of the body, including both the upper and lower torso. *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 21. Children are provided superior upper torso restraint by conventional child safety seats because the dual shoulder straps distribute the restraining loads over a wider area of the body. *Id.*

Furthermore, a conventional seat with an internal harness incorporates a crotch strap to hold the lap belt down on a child's pelvis to ensure that the lap belt remains on the pelvis and prevents a child from submarining the lap belt. *Id.* at 11. Mr. Whitman states that the other possible scenario that occurred in this accident "was [that] some submarining during the crash as a result of not having a crotch strap to hold the belt down . . . because the anatomy of [a] child is such that it doesn't engage with the lap belt very well." (Whitman Dep. at 63.)

According to the testimony of Dr. Adelman, Jacqueline sustained "hemorrhage in the neck area underneath [the shoulder belt] and then an abdominal hemorrhage from the [lap belt]." (Adelman Dep. at 20.) In addition, Dr. Adelman stated that Jacqueline experienced cervical injury which resulted from excessive flexion of the neck caused by inertial loading of the head. *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 13. Dr. Adelman claims that it is evident that Jacqueline submarined on the shoulder belt during the accident because of the bruising imprinted on Jacqueline's chest, which resulted from the "movement between the body and the seat belt." (Adelman Dep. at 39.) Dr. Adelman states that if Jacqueline had not submarined under the shoulder belt "there would certainly be less hemorrhage into Jacqueline's chest and neck area." *Id.* at 43. Additionally, Dr. Adelman explains that "Jacqueline's abdominal injuries were caused by the lap belt loading the abdominal region of her body." *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 13. Furthermore, Mr. Whitman claims that "if Jacqueline was . . . properly restrained in [five-point restraint], other than bruising and abrasions from the loading in the restraint system, [he] would not have expected any serious, nonrecoverable injuries." (Whitman Dep. at 106.) Mr. Whitman states that while Jacqueline "fell well within the weight and height range that is listed in the

instructions for the subject Voyager . . . Jacqueline would also fit into a five-point restraint system,” and therefore he believes that the National Highway Traffic Safety Administration (NHTSA) “should not allow [BPB] to be used for a child who is under forty (40) pounds and under forty (40) inches.” *Id.* at 25, 92.

2. *The Alternative Designs are “Reasonable” Substitutes for the Voyager*

Plaintiffs argue that the alternative designs are reasonable substitutes for the Voyager. In his testimony, Mr. Whitman cites to studies, conducted by Dr. Rajiv Menon, in which it appears that some BPBs would have provided better protection for Jacqueline during this particular accident. *Id.* at 57. Mr Whitman states that according to the studies “the Century Breverra BPB and the Britax BPB resulted in lower back loading than the Cosco high-back booster, which is essentially the same as the Voyager.” *Id.* at 58. However, Mr. Whitman states that the alternative design in this case is not another BPB, but rather a five-point restraining seat. *Id.* at 69.

Plaintiffs further argue that New Jersey’s child safety law requires that children not be permitted in booster seats until the child is between forty (40) and eighty (80) pounds. (Pl.s’ Opp’n at 2.) In his testimony, Mr. Whitman states that the National Highway Traffic Safety Administration (NHTSA), which regulates car seats, consistently recommends that “a forward-facing five-point convertible is the safest way to transport a child under forty (40) pounds and forty (40) inches or one that has not outgrown a forward-facing child safety seat.” (Whitman Dep. at 52.) The NHTSA recommends that parents “keep [their] child in a safety seat with a full harness as long as possible, at least until forty (40) pounds.” National Highway Traffic Safety Administration, *Tip #1: Quick Safety Seat Checkup* (1998),

http://www.nhtsa.dot.gov/people/outreach/safesobr/21qp/html/camera_ready/tip_01.pdf. Mr. Whitman points out that a number of five-point restraint seats were on the market at the time of this incident and “would have accommodated this child who was under forty (40) pounds and under forty (40) inches.” (Whitman Dep. at 92.)

C. Defendant’s Response

1. *Plaintiffs Incorrectly Interpret the Law*

Defendant states that New Jersey law 39:3-76.2a, which Plaintiffs claim prohibit the use of booster seats for children who weigh less than forty (40) pounds, instead requires the use of either a child restraint system or a booster seat for children up to eighty (80) pounds.² (Def.’s Reply Br. at 2.) The federal law referred to in the New Jersey statute, Federal Motor Vehicle Safety Standard (FMVSS) 213, says that “booster seats shall not be recommended for children whose masses are less than 13.6 kg (thirty (30) pounds).” 49 C.F.R. § 571.213 Section 5.5.5(f). Defendants allege that Plaintiffs rely only on a NHTSA recommendation that children should not ride in booster seats until “they outgrow their forward-facing seats (usually around age four (4) and forty (40) pounds). (Def.’s Reply Br. at 3.) Defendant argues that Plaintiffs insist that both federal law and the New Jersey statute use forty (40) pounds as the minimum weight for booster seats, when in fact federal law sets the minimum weight at thirty (30) pounds and New Jersey law is silent on the issue. *Id.* at 3-4.

2. *Plaintiffs Incorrectly Interpret the Facts*

² See N.J.S.A. § 39:3-76.2a (2002). “Every person operating a motor vehicle, other than a school bus, equipped with safety belts who is transporting a child under the age of eight years and weighing less than (eighty) pounds on roadways, streets or highways of this State, shall secure the child in a child passenger restraint system or booster seat, as described in Federal Motor Vehicle Safety Standard Number 213, in a rear seat.”

Defendant argues that the “numerous studies” that Plaintiffs rely on to show that children in child restraints with five-point harnesses do not suffer fractured necks are based on half-truths. Defendant does not argue that the studies which Plaintiffs cite did not find any broken necks among children restrained in seats in five-point harnesses. *Id.* at 4. However Defendant does state that those studies also did not find any broken necks among children restrained in BPB or, for that matter, in any kind of child restraint system. (Whitman Dep. at 112-13.) Defendant claims that these studies cannot be used for a basis that one type of child restraint is safer than another. (Def.’s Reply Br. at 5.)

III. DISCUSSION

Defendant’s motion for summary judgment on the remaining nineteen (19) counts of Plaintiffs’ complaint is granted. Counts one (1) through five (5) are based solely on the alleged actions of Mr. Vanderwiele. Counts eleven (11) through fifteen (15) and Counts sixteen (16) through twenty (20) are brought against Coscos, Inc. and Target Corp., respectively, both of whom were dismissed from this case by an Agreed Order entered on April 11, 2007. Count seven (7) alleges that Defendant “breached the express warranties created pursuant to N.J.S.A. § 12A:2-313,” however that statute, does not “create” any warranties, nor have Plaintiffs identified any statements made by Defendant that would create an express warranty. Count eight (8) and nine (9) fail to state an independent cause of action because they are subsumed by New Jersey’s Products Liability Act. Finally Count ten (10) purports to state a claim for punitive damages based on Defendant’s alleged “reckless indifference,” however this claim, too, fails to state an independent cause of action. The Court further notes that in oral argument on July 10, 2008 Plaintiffs conceded to the Court on the record that those nineteen (19) counts should be

dismissed. Therefore, the only remaining count for consideration is the products liability cause of action (Count VI).

Defendant has moved for summary judgment arguing (1) there is no evidence that any defect in the car seat was a substantial factor in Jacqueline's injuries, and (2) there is no evidence that there was a reasonable alternative design to the car seat using either a "state of the art" or a "risk/utility" analysis. The Court denies Defendant's motion for the following reasons: (1) there is sufficient evidence that would allow a reasonable jury to find that a defect in the Voyager was a "substantial factor" in producing Jacqueline's injuries, (2) there is sufficient evidence that would allow a reasonable jury to conclude that the alternative designs are feasible, practical, and safer substitutes for Defendant's product, and (3) there is sufficient evidence that would allow a reasonable jury to find that a practical alternative design could have been adopted that would have prevented the harm without substantially impairing the intended function of the product.

A. Standard of Review Pursuant to Federal Rule of Civil Procedure 56(c)

Pursuant to Rule 56(c) of the Federal Rules of Civil Procedure, summary judgment is proper "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issues as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). The party moving for summary judgment bears the initial burden of showing that there is genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Once, the movant has met this prima facie burden, the non-movant "must set forth specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e). A non-movant must present actual evidence that raises a genuine issue of material fact and may not rely on mere allegations. *Anderson v. Liberty Lobby*,

Inc., 477 U.S. 242, 249 (1986).

The court must view the evidence in the light most favorable to the non-movant when deciding a summary judgment motion. *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). At the summary judgment stage, the Court's role is "not . . . to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *Anderson*, 477 U.S. at 249. Under this standard, the "mere existence of a scintilla of evidence in support of the [non-movant's] position will be insufficient [to defeat a Rule 56(c) motion]; there must be evidence on which the jury could reasonably find for the [non-movant]." *Id.* at 252.

"By its very terms, this standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." *Id.* at 247-48. A fact is material only if it might affect the action's outcome under governing law. *Id.* at 248. "[T]here is no issue for trial unless there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party." *Id.* at 249. "If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Id.* at 249-50 (internal citations omitted).

B. Elements of a Product Liability Action

1. *Common Law Standard*

To recover in a products liability action, a plaintiff must prove that the product was defective when it left the defendant's control, and proximately caused injury to a reasonably foreseeable user. *Zaza v. Marquess & Nell, Inc.*, 675 A.2d 620, 627-28 (N.J. 1996); *Becker v.*

Baron Bros., 649 A.2d 613, 616 (N.J. 1994). In addition, a plaintiff claiming that a product is defectively designed bears the burden of proving that the defendant failed to use a reasonable alternative design. *Cavanaugh v. SKIL Corp.*, 751 A.2d 518, 521 (N.J. 2000); *Diluzio-Gulino v. Daimler Chrysler Corp.*, 897 A.2d 438, 441 (N.J. Super. 2006). The common law standard focuses on whether there is a practical alternative design using a “risk/utility” analysis; this analysis requires a comparison of defendant’s product with plaintiff’s proposed alternative. *Lewis v. American Cyanamid Co.*, 715 A.2d 967, 980 (N.J. 1998); *Diluzio-Gulino*, 897 A.2d at 441.

2. *Statutory Standard*

The New Jersey Products Liability Act (“NJPLA”) provides that a manufacturer shall not be liable for an allegedly defective design if “there was not a practical and technically feasible alternative design that would have prevented the harm without substantially impairing the reasonably anticipated or intended function of the product.” N.J. Stat. Ann. §2A:58C-3a(1) (West 1987). The statutory standard requires proof that the challenged product was “state of the art;” if an alternative design was not technologically feasible without impairing the utility of the product, then no comparison with plaintiff’s proffered alternative design was even necessary. *Cavanaugh*, 751 A.2d at 521-23.

3. *Crashworthiness Cases*

In crashworthiness cases, the plaintiff does not contend that defendant’s product caused the accident, but rather that it allowed enhanced injuries to result over what would otherwise have occurred during the accident in a properly-designed product. “Apportionment is generally a problem that occurs in crashworthy cases involving an indivisible injury, such as death, where it is

often difficult to prove with any precision whether the alleged defect was the sole cause of the injury, or whether the second collision contributed to the injury in a substantial degree.”³ *Poliseno v. General Motors Corp.*, 744 A.2d 679, 685 (App. Div. 2000). In such a case, the “manufacturer would be responsible only for the enhanced injuries or those that occurred because of the alleged defect.” *Reichert v. Vegholm*, 840 A.2d 942, 950 (App. Div. 2004). Under New Jersey law, the plaintiff’s burden is to show that the alleged design defect “was a **substantial factor** in producing an injury that would not have occurred, or would have been substantially diminished, in the absence of the defect.” *Poliseno v. General Motors Corp.*, 744 A.2d 679, 686 (App. Div. 2000); (*Oddi v. Ford Motor Co.*, 234 F.3d 136, 158-59 (3d. Cir. 2000). “When a plaintiff has sustained that burden, the plaintiff need not quantify to what extent the second collision enhanced the injury.” *Poliseno*, 744 A.2d at 686. However, “if the defendant seeks credit against the verdict for an injury that it claims resulted, in part from the first collision, defendant shall have the burden of proof on that issue.” *Reichert*, 840 A.2d at 950.

C. Analysis

1. *Substantial Factor Analysis*

Plaintiffs argue that there is evidence that the defective design of the Voyager was a “substantial factor” in producing Jacqueline’s injuries. Mr Whitman states that “if Jacqueline was . . . properly restrained in [a five point tether], other than bruising and abrasions from the loading in the restraint system, [he] would not have expected any serious, nonrecoverable injuries.” (Whitman Dep. at 106.) Defendant argues that Plaintiffs have failed to meet the standards set forth

³ This problem occurs when the plaintiff’s indivisible injury, such as death, was “allegedly caused by two concurrent causes,” referred to as the first and second collision. *Reichert v. Vegholm*, 840 A.2d 942, 950 (App. Div. 2004).

in *Oddi* and *Poliseno*, and therefore Defendant is entitled to summary judgment. *Oddi v. Ford Motor Co.*, 234 F.3d 136 (3d Cir. 2000); *Poliseno v. General Motors Corp.*, 744 A.2d 679 (App. Div. 2000).

In *Oddi*, the Third Circuit held that summary judgment is proper in a products liability case when an expert cannot establish the causal linkage between an alleged defect and a plaintiff's injuries. *Oddi*, 234 F.3d at 158-159. In the case, the plaintiff's expert opinion did not withstand *Daubert*'s scrutiny test which requires that an "expert's opinion must be based on the methods and procedures of science rather than on subjective belief or unsupported speculation." *Id.* at 158; *see also Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). In *Oddi*, Plaintiff's expert conducted no tests and failed to attempt to calculate any of the forces on *Oddi*, the driver, or the truck during the accident. *Id.*

Here, on the other hand, both Mr. Whitman and Dr. Adelman rely on numerous studies and a child dummy test, which are useful in demonstrating injury trends, when they make their opinions. *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 26. Based on their findings, both experts concluded that Jacqueline would have sustained only bruising and abrasions had Jacqueline been properly restrained in five-point restraint rather than the Voyager. (Whitman Dep. at 106.)

Defendant also argues that Plaintiffs have failed to satisfy their burden of showing that the alleged defect was a substantial factor in increasing the harm beyond that which would have resulted from the first collision. Defendant states that both Plaintiffs and their medical experts acknowledged that this was a severe accident in which serious and fatal injuries were expected. (Def.'s Br. at 9.) Furthermore, Defendant argues that neither Mr. Whitman nor Dr. Adelman could

quantify the amount of the “amplification of accelerations and loads” that was attributable to the Voyager’s design, nor were they able to give an opinion as to the amount of Jacqueline’s “submarining” or the possible increased severity of Jacqueline’s injuries as a result of the “submarining.” *Id.* at 3.

Here, Jacqueline’s indivisible injury was allegedly caused by concurrent causes: the actual accident between Melissa Viets and Mr. Vanderwiele and the alleged defective design of the Voyager. As set forth in *Poliseno*, when a case involves an indivisible injury caused by concurrent harms, the plaintiff must only offer “some evidence that the injuries were in fact enhanced because of the defective product.” *Poliseno*, 744 A.2d at 685. In such a case, plaintiff need not quantify or prove the extent of the increased harm. *Id.* Rather if the “defendant contends that the injury (death) is divisible and resulted from both the first collision, for which it is not responsible, and the second collision,” then the burden of proof on apportionment shifts to the defendant. *Id.* at 687; see *Reichert*, 840 A.2d at 951 (deciding that a trial judge correctly refused to shift the burden of proof from plaintiff to defendants, in part, because the case did not involve an indivisible injury caused by concurrent harms). Plaintiffs have set forth evidence that Jacqueline’s injuries would have been less severe had Jacqueline been restrained in a five-point seat rather than in the Voyager. (Whitman Dep. at 106.)

This court finds that there is a genuine issue of material fact and that a jury could reasonably find that a defect in the Voyager was a “substantial factor” in producing Jacqueline’s injuries. Therefore, summary judgment is not appropriate.

2. *Practical and Feasible Alternative Design Analysis*

i. *Common Law “Risk/Utility” Analysis*

Defendant argues that there is no evidence that any of the alternative designs would have prevented Jacqueline's injuries. Defendant cites *Diluzio-Gulino v. Daimler Chrysler Corp.*, which recognizes that a "plaintiff must prove, not only that the alternative design is feasible and practical but that it is also safer than the manufacturer's design." *Diluzio-Gulino v. Daimler Chrysler Corp.*, 897 A.2d 438, 441 (N.J. Super. 2006). Defendant argues that BPB seats are easier to use, and as a result, are more likely to be used correctly than seats with five-point internal harness, such as the Safe Embrace and the Wizard. (Def.'s Br. at 15.) Defendant claims that based on these findings five-point restraints are less safe since the risk of injury is actually greater in a five-point restraint than in a BPB seat. *Id.*

Here, New Jersey's child safety law and Plaintiffs' experts demonstrate that a five-point restraint would have been safer than a BPB seat for a child of Jacqueline's height and weight. NHTSA consistently recommends that parents "keep [their] children in a safety seat with a full harness as long as possible, at least until forty (40) pounds." National Highway Traffic Safety Administration, *Tip #1: Quick Safety Seat Checkup* (1998), http://www.nhtsa.dot.gov/people/outreach/safesobr/21qp/html/camera_ready/tip_01.pdf. In addition, Dr. Adelman cites studies that consistently show that no submarining occurs in a five point restraint seat, but frequently occurs with BPB seats. (Adelman Dep. at 43.) Furthermore, Mr. Whitman states that if Jacqueline was adequately restrained in a five-point restraint, she would have sustained only slight bruising and abrasions during the crash. *Preliminary Restraint System Analysis Report Viets v. Dorel, et. al.* at 9. While reasonable minds may differ on Plaintiffs' motivation for purchasing a particular car seat, the Court finds that resolution of that issue is for the jury. Thus, summary judgment must be denied.

ii. *Statutory “State of the Art” Analysis*

Defendant argues that it has an absolute defense under New Jersey Products Liability Act because (1) convertible seats are not a practical and technically feasible alternative design to a BPB seat, and (2) there is no evidence that convertible seats would have prevented the harm without substantially impairing the reasonably anticipate or intended function of the product. (Def.’s Br. at 13.) Defendant cites the test of Section (Two) of *The Restatement (Third) of Torts: Products Liability*, which sets out “a broad range of factors [that] may be considered in determining whether an alternative design is reasonable.” *Restatement (Third) of Torts, Products Liability*, § 2, cmt. f (1998). The factors include, among others, “the magnitude and probability of the foreseeable risks of harm, . . . the likely effects of the alternative design on production costs, . . . the effects of the alternative design on product longevity, maintenance, repair, and esthetics, . . . [and] the overall safety of the product must be considered.” *Id.*

The Court finds that Plaintiffs have presented sufficient evidence so that a jury could reasonably conclude that a feasible alternative design could have been practically adopted that would have prevented the harm without substantially impairing the intended function of the product. The intended function of both a BPB seat and a five-point restraint seat is to safely restrain a child transporting in an automobile. While there are differences between a BPB seat and a five-point restraint seat, it appears that other BPB seats would have provided better protection for Jacqueline in this particular accident. According to studies conducted by Dr. Rajiv Menon, “the Century Breverra BPB and the Britax BPB resulted in lower back loading than the Cosco high-back booster.” (Whitman Dep. at 58.) Based on these studies, a jury could reasonably find that the Voyager BPB seat may have been defective; therefore, summary judgment must be denied.

IV. CONCLUSION

For the reasons stated herein, Defendant's Motion for Summary Judgment is denied in part and granted in part. Specifically, Defendant's motion for summary judgment relating to Count VI, the product liability count, is denied. With respect to Counts I-V and VII-XX, Defendant's motion for summary judgment is granted.

Plaintiffs have provided sufficient evidence for a trier of fact to reasonably find that a defect in the Voyager was a "substantial factor" in producing Jacqueline's injuries. Plaintiffs have also presented sufficient evidence for a jury to reasonably conclude that the alternative designs are feasible, practical, and safer substitutes for Defendant's product. Finally, Plaintiffs have offered sufficient evidence so that a reasonable person could conclude that a reasonable alternative design could have been practically adopted that would have prevented the harm without substantially impairing the intended function of the product. The Court finds that there are genuine issues of material fact, and therefore summary judgment is not appropriate at this time.

An appropriate Order accompanies this Memorandum Opinion.

DATED: July 29, 2008

